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Case report / Olgu sunumu

CARCINOMA OF MALE BREAST; Case report.

Erkek meme kanseri; Olgu sunumu.

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ABSTRACT

Male breast cancer is an uncommon disease and accounts for only 0.7% of all breast cancer diagnoses. The incidence of male breast cancer increases with advancing patient age, climbing steadily until a plateau is reached around age 80 year. Hormonal factors have been implicated in the development of this disease but still the etiology of this rare entity is unclear. Similar to that of female breast cancer infiltrating ductal cancer is the most common tumor type reported. Since the male breast does not have lobules and acini, lobular carcinoma is seen infrequently. Male breast cancer patients presents as painless subareolar lump, nipple retraction, and bleeding from the nipple. Diagnostic and treatment strategies for the management of carcinoma of male breast are similar as in females. We present a rare case of carcinoma male breast.

Key words: Male, breast, intraductal carcinoma.

ÖZET

Erkek meme kanseri oldukça nadir görülür ve tüm meme kanserlerinin /5.7'sini oluşturur. Görülme sıklığı yaşla birlikte artar ve 80'li yaşlarda bir plato çizer. Hormonal faktörler etyolojide sorumlu tutulmakla beraber kesin bir sebep henüz ortaya konulamamıştır. Kadınlarda olduğu üzere infiltratif tip duktal kanserler en sık görülen patolojik formdur. Erkek meme dokusu lobül ve asini içermediği için lobüler karsinom daha nadir görülür. Hastalar ağrısız şişlik, meme başında çekilme ve kanama ile hekime gelirler. Tanı ve tedavi prensipleri kadınlardaki kanser vakalarıyla benzerlik gösterir. Burada, nadir görülen bir erkek meme kanseri vakası sunuldu.

Anahtar kelimeler: Erkek, meme, intraduktal karsinoma.

INTRODUCTION

Male breast cancer is an uncommon disease and accounts for only 0.7% of all breast cancer diagnoses. The incidence of male breast cancer increases with advancing patient age, climbing steadily until a plateau is reached around age 80 year. However as in cases of breast cancer in women, breast cancer in men has been increasing; the incidence has climbed 26% over the past 25 years (1,2).

Case

A 65 year male presented with an ulceroproliferative growth in the left breast involving the nipple areolar complex since last 4 months (Figure 1). There was no history of any nipple discharge. He did not have a past history of receiving chest wall irradiation, gynecomastia or any testicular pathology. General and systemic examinations did not reveal any significant positive finding. Local examination of left breast revealed an ulceroproliferative growth of size 5x5cm involving the nipple areolar complex, which was tender and hard in consistency. Anterior and central group of left axillary lymph nodes were enlarged, mobile, non tender and hard in consistency.

Routine hematological, renal function and liver function tests were found to be within normal limits. Chest radiology and abdominal sonography was done which was found to normal. Fine needle aspiration cytology (FNAC) from the ulceroproliferative growth suggested malignant cells. FNAC from the

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enlarged axillary lymph nodes also showed metastatic malignant cells. The tumor was staged to be $T_4N_1M_0$ and was planned mastectomy.

Figure 1: Left breast showing an ulceroproliferative growth of size 5x5 cm involving the nipple areolar complex.

Modified radical mastectomy of the left breast was done with level 3 axillary lymph node dissection. Histopathology of the specimen confirmed grade II infiltrating ductal carcinoma with 4 out of 18 dissected axillary lymph node showing metastatic deposits with perinodal extension. Oestrogen and progesterone receptor status of the tumor tissues was found to be strongly positive.

Patient is being planned adjuvant chemotherapy along with axillary radiotherapy followed by five years adjuvant hormonal therapy with anti oestrogen Tamoxifen.

DISCUSSION

The incidence of carcinoma of breast is approximately 1 in 100.000 males. Review of literature shows that the breast cancer has been reported in male patients ranging in age from 5-93 years with a mean age of diagnosis for men at 67 years, which is 5 years older than the average age at diagnosis for women (3).

Hormonal factors particularly high oestrogen and prolactin have been implicated in the development of this disease but still the etiology of this entity is unclear. Testicular abnormalities such as undescended testes, congenital inguinal hernia, orchidectomy, orchitis, and infertility have been consistently associated with elevations in male breast cancer risk. Klinefelter's syndrome may be present in 3-7% of men with breast cancer. Benign breast conditions, including history of breast trauma, nipple discharge and gynecomastia have also been reported to be associated with breast cancer in men. Alcohol use, liver disease, obesity, occupational hazards like elect-romagnetic field radiation, chest wall irradiation and diet have all been proposed as risk factors. Hepatic damage leading to hyperestrogenemia has been proposed as the cause behind the pathology. Mutations in $BRCA_1$ and $BRCA_2$ also increase the risk of affected men developing hereditary breast cancer with patients with $BRCA_2$ mutation presenting early and having a poor prognosis. Mutations in the androgen receptor gene, PTEN (Cowden's syndrome), and mismatch repair genes ($hMLH_1$) have also been reported in male patients with breast cancer (4-10).

Since the male breast does not have lobules and acini, lobular carcinoma is seen infrequently. Paget disease of the nipple has also been seen in men, but lobular carcinoma in situ has not. Similar to that of female breast cancer, and infiltrating ductal cancer is the most common tumor type. Male ductal intraepithelial neoplasia (ductal carcinoma in situ), in contrast to similar lesions in females, displays a distinct histologic profile in which the majority of tumors are of the papillary type, with cribriform, micropapillary, comedo and solid types being much less common. For invasive carcinomas, the female and male tumors are morphologically indistinguishable with the major histologic subtypes of nonlobular breast carcinoma being ductal, medullary, mucinous, and papillary. Approximately 90% of male breast cancers express the estrogen receptor, and 81% express the progesterone receptor. In contrast, the her2-neu proto-oncogene is less likely to be over expressed in cancers of the male breast (2,11-13).

Male breast cancer patients presents as painless subareolar lump, nipple retraction, and bleeding from the nipple with a slight preponderance towards the left breast. Literature also has reported simultaneous bilateral carcinoma of the male breast. Metastatic male breast carcinoma from adenocarcinoma prostate has also been described. Lymph node involvement and the hematogenous pattern of spread are similar to those found in female breast cancer (14,15).

The sensitivity and specificity of mammography for the diagnosis of male breast cancer have been reported to be 92% and 90%, respectively. Ultrasonography can also be a useful adjunct and provide information regarding nodal involvement. Fine needle aspiration cytology and or core biopsy may confirm the diagnosis. The extent of disease can be determined from laboratory evaluation; chest radiography, bone scan, and computed tomography scan of the abdomen, as clinically appropriate. The TNM staging system for male breast cancer is identical to the staging system for female breast cancer (16).

Tumor size and lymph node involvement are two clear prognostic factors for male patients with breast cancer. Men with tumors measuring 2-5 cm have a 40% higher risk of death than tumors <2 cm in maximum diameter. Similarly, men with lymph node involvement have a 50% higher risk of death than those without lymph node involvement. Overall survival rates are lower for men than in females due to an older age at diagnosis and more advanced disease at presentation (2).

Treatment protocol for the management of carcinoma of male breast is similar as in females. Most men are treated with modified radical mastecto-

my with axillary lymph node dissection or sentinel node biopsy. However adjuvant hormonal therapy clearly has a defined role in male breast cancer patients with hormone receptor-positive tumors as a high proportion of males with breast cancer express the estrogen or progesterone receptor (17,18).

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